CONTENTS

Plasma Membrane Calcium Flux, Protein Kinase C Activation and Smooth Muscle Contraction. John Forder, Alexander Scriabine and Howard Rasmussen .......................................................... 267

Beneficial Effects of a New Potent and Specific Thromboxane Receptor Antagonist (SQ-29,548) in Vitro and in Vivo. Harald Darius, J. Bryan Smith and Allan M. Lefer .................................................. 274

Pharmacokinetics and Pharmacodynamics of Subcutaneous Morphine Pellets in the Rat. Byron C. Yoburn, Jack Chen, Theresa Huang and Charles E. Inturrisi ............................................ 282

Evidence that D-1 Dopamine Receptors Contribute to the Supersensitive Behavioral Responses Induced by L-Dihydroxyphenylalanine in Rats Treated Neonatally with 6-Hydroxydopamine. George R. Breese, Alan Baumeister, T. Celeste Napier, Gerald D. Frye and Robert A. Mueller .......................................................... 287

Effects of β-Funaltrexamine in Normal and Morphine-Dependent Rhesus Monkeys: Observational Studies. Debra E. Gmerek and James H. Woods .................................................. 296

Distribution and Fate of Acetaminophen Conjugates in Fetal Lambs in Utero. Laurene H. Wang, Abraham M. Rudolph and Leslie Z. Benet .................................................. 302


Furosemide Cholestasis in Isolated Perfused Rat Liver: Partial Dependency on Perfusate Sodium and Chloride. S. Sawkat Anwer .................................................. 313


Effects of Chronic Dietary Lithium on Behavioral Indices of Dopamine Denervation Supersensitivity in the Rat. N. R. Swerdlow, D. Lee, G. F. Koob and F. J. Vaccarino .................................................. 324

Role of the Sympathetic Nervous System in Functional Maturation of Müller's Smooth Muscle in the Rat. Peter G. Smith .................................................. 330

A Role for Adenylate Cyclase in the Subsensitivity to Isoproterenol during Ontogenesis of the Embryonic Chick Ventricle. Carolyn J. Smith and Achilles J. Pappano .................................................. 335

Isotopic Selectivity of Dobutamine Enantiomers in the Pithed Rat. Robert R. Ruffolo, Jr. and Karen Messick .................................................. 344


Ontogeny of Food Deprivation Effects on Ornithine Decarboxylase: Ornithine Decarboxylase Induction by Alpha and Beta Agonists. Cynthia M. Kuhn, Michael K. McMillian, Gary E. Evoniuk and Saul M. Schanberg .................................................. 361

N-Desmethyl Diazepam Physical Dependence in Dogs. Laura F. McNicholas, William R. Martin and Terry A. Pruitt .................................................. 368


Cephalosporin-Induced Hypoprothrombinemia: Possible Role for Thiol Methylation of 1-Methyltetrazole-5-Thiol and 2-Methyl-1,3,4-Thiadiazole-5-Thiol. Adrian L. Kerremans, James J. Lipsky, Jon Van Loom, Marta O. Gallego and Richard M. Weinshilboum .................................................. 382

Receptors for Opioid Peptides in the Guinea-Pig Ileum. A. E. Takemori and P. S. Portoghese .................................................. 389

Clonidine Effects on Sulfobromophthalein Disposition in Mice. Zvi Ben-Zvi and Areh Hurwitz .................................................. 393

Intraseptal Microinjections of Substance P and Analogs Potentiate Pentobarbital-Induced Narcosis and Depression of Hippocampal Cholinergic Activity. Jonathan R. Zucker, Henry Lai and Akira Horita .................................................. 398

Contents Continued on iv
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose-Dependent Pharmacokinetics of Diflunisal in Rats: Dual Effects</td>
<td>Jiunn H. Lin, Kay F. Hooke, Kuang C. Yeh and Daniel E. Duggan</td>
<td>402</td>
</tr>
<tr>
<td>of Protein Binding and Metabolism.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanism of Calcium Channel Inhibition by Phenytoin: Comparison with</td>
<td>Robert O. Messing, Celia L. Carpenter and David A. Greenberg</td>
<td>407</td>
</tr>
<tr>
<td>Classical Calcium Channel Antagonists.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects of Quaternary Naltrexone and Chloridiazepoxide in Squirrel</td>
<td>Philip H. Warren and W. H. Morse</td>
<td>412</td>
</tr>
<tr>
<td>Monkeys with Enhanced Sensitivity to the Behavioral Effects of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naltrexone.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced Neutrophil Superoxide Anion Release after Prolonged Infusion</td>
<td>Stephen L. Peck, Richard B. Johnston, Jr. and Lawrence D. Horwitz</td>
<td>418</td>
</tr>
<tr>
<td>of Lidocaine.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shock Titration in the Rhesus Monkey: Effects of Opiate and Nonopiate</td>
<td>James L. Bloss and Donna L. Hammond</td>
<td>423</td>
</tr>
<tr>
<td>Analgesics.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synaptic Facilitation by 3-Aminopyridine and Its Antagonism by</td>
<td>W. K. Riker, M. Matsumoto and K. Takashima</td>
<td>431</td>
</tr>
<tr>
<td>Verapamil and Diltiazem.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects of Serotonin Receptor Agonists and Antagonists on Schedule-</td>
<td>Linda S. Brady and James E. Barrett</td>
<td>436</td>
</tr>
<tr>
<td>Controlled Behavior of Squirrel Monkeys.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antagonistic and Rate-Suppressing Effects of Opioid Antagonists in</td>
<td>Charles P. France and James H. Woods</td>
<td>442</td>
</tr>
<tr>
<td>the Pigeon.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects of Cholinesterase Inhibitors on Evoked Responses in Field</td>
<td>Andrew M. Williamson and John M. Sarvey</td>
<td>448</td>
</tr>
<tr>
<td>CA1 of the Rat Hippocampus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discriminative-Stimulus Effects of Midazolam in Squirrel Monkeys:</td>
<td>Roger D. Spealman</td>
<td>456</td>
</tr>
<tr>
<td>Comparison with Other Drugs and Antagonism by Ro 15-1788.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Effects of Selected Opiates and Phencyclidine in the</td>
<td>J. Bergman, J. Hassoun and C. R. Schuster</td>
<td>463</td>
</tr>
<tr>
<td>Nondependent and Cyclazocine-Dependent Rhesus Monkey.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protective Effect of a Selective Leukotriene Antagonist in</td>
<td>J. A. Cook, W. C. Wise and P. V. Halushka</td>
<td>470</td>
</tr>
<tr>
<td>Endotoxemia in the Rat.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prostaglandin Synthase Catalyzed Metabolic Activation of p-Phenytoine</td>
<td>Roger Larsson, David Ross, Tomas Berlin, Lars Inge Olsson and Peter</td>
<td>475</td>
</tr>
<tr>
<td>and Acetaminophen by Microsomes Isolated from Rabbit and Human</td>
<td>Moldéus</td>
<td></td>
</tr>
<tr>
<td>Kidney.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects of Blockades of Alpha and Beta Adrenoceptors and Dopamine</td>
<td>H. Hiss, Y. Hayashi and S. Satoh</td>
<td>481</td>
</tr>
<tr>
<td>Receptors on Renal Nerve Stimulation-Induced Prostaglandin E2 and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renin Release in Anesthetized Dogs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapid Tolerance to Neuroleptic-Induced Stimulation of Dopamine</td>
<td>Gaetano Di Chiara and Assunta Imperato</td>
<td>487</td>
</tr>
<tr>
<td>Release in Freely Moving Rats.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxation of Vascular Smooth Muscle by HA-1004, an Inhibitor of</td>
<td>Tomohiko Ishikawa, Masaki Inagaki, Masato Watanabe and Hiroyoshi Hidaka</td>
<td>495</td>
</tr>
<tr>
<td>Cyclic Nucleotide-Dependent Protein Kinase.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional Involvement of Vasopressin in the Maintenance of Systemic</td>
<td>Mark J. Winn, Sheila M. Gardner and Terence Bennett</td>
<td>500</td>
</tr>
<tr>
<td>Arterial Blood Pressures after Phenoxybenzamine or Phentolamine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration: Studies in Long-Evans and Brattleboro Rats.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacokinetics and Systemic Fibrinogenolytic Effects of Recombinant</td>
<td>M. Verstraete, H. Bounouameux, F. De Cock, F. Van de Werf and D. Collen</td>
<td>506</td>
</tr>
<tr>
<td>Human Tissue-Type Plasminogen Activator (rt-PA) in Humans.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effect of Altered Plasma Protein Binding on Pharmacokinetics and</td>
<td>Masato Yasuhara, Junko Fujiiwa, Sumiko Kitade, Hirokazu Katayama,</td>
<td>513</td>
</tr>
<tr>
<td>Pharmacodynamics of Propranolol in Rats after Surgery: Role of</td>
<td>Katsumiko Okumura and Ryoei Hori</td>
<td></td>
</tr>
<tr>
<td>Dual Effects of Clonidine on Micturition Reflex in Urethane Anesthetized Rats. Carlo Alberto Maggi, Paolo Santi, Martino Furio and Alberto Meli</td>
<td>528</td>
<td></td>
</tr>
<tr>
<td>Sensitization to Repeated Enkephalin Administration into the Ventral Tegmental Area of the Rat. I. Behavioral Characterization. Peter W. Kalivas, Susan Taylor and Jane S. Miller</td>
<td>537</td>
<td></td>
</tr>
<tr>
<td>Sensitization to Repeated Enkephalin Administration into the Ventral Tegmental Area of the Rat. II. Involvement of the Mesolimbic Dopamine System. Peter W. Kalivas</td>
<td>544</td>
<td></td>
</tr>
</tbody>
</table>